

## **EXHIBIT 4**



Apr 22 2009  
5:43PM

**UNITED STATES DISTRICT COURT  
SOUTHERN DISTRICT OF NEW YORK**

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In Re: Methyl Tertiary Butyl Ether ("MtBE")  
Products Liability Litigation

MDL No. 1358  
Master File C.A. No.  
1:00-1898 (SAS)

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This document relates to the following cases:

*City of New York v. Amerada Hess Corp., et al.*  
04 Civ. 3417

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**2<sup>nd</sup> ERRATA TO FEBRUARY 6, 2008 EXPERT REPORT OF David B. Terry, P.G.  
LEGGETTE, BRASHEARS & GRAHAM, INC.**  
6 Arrow Road  
Ramsey, NJ 07446

Signature

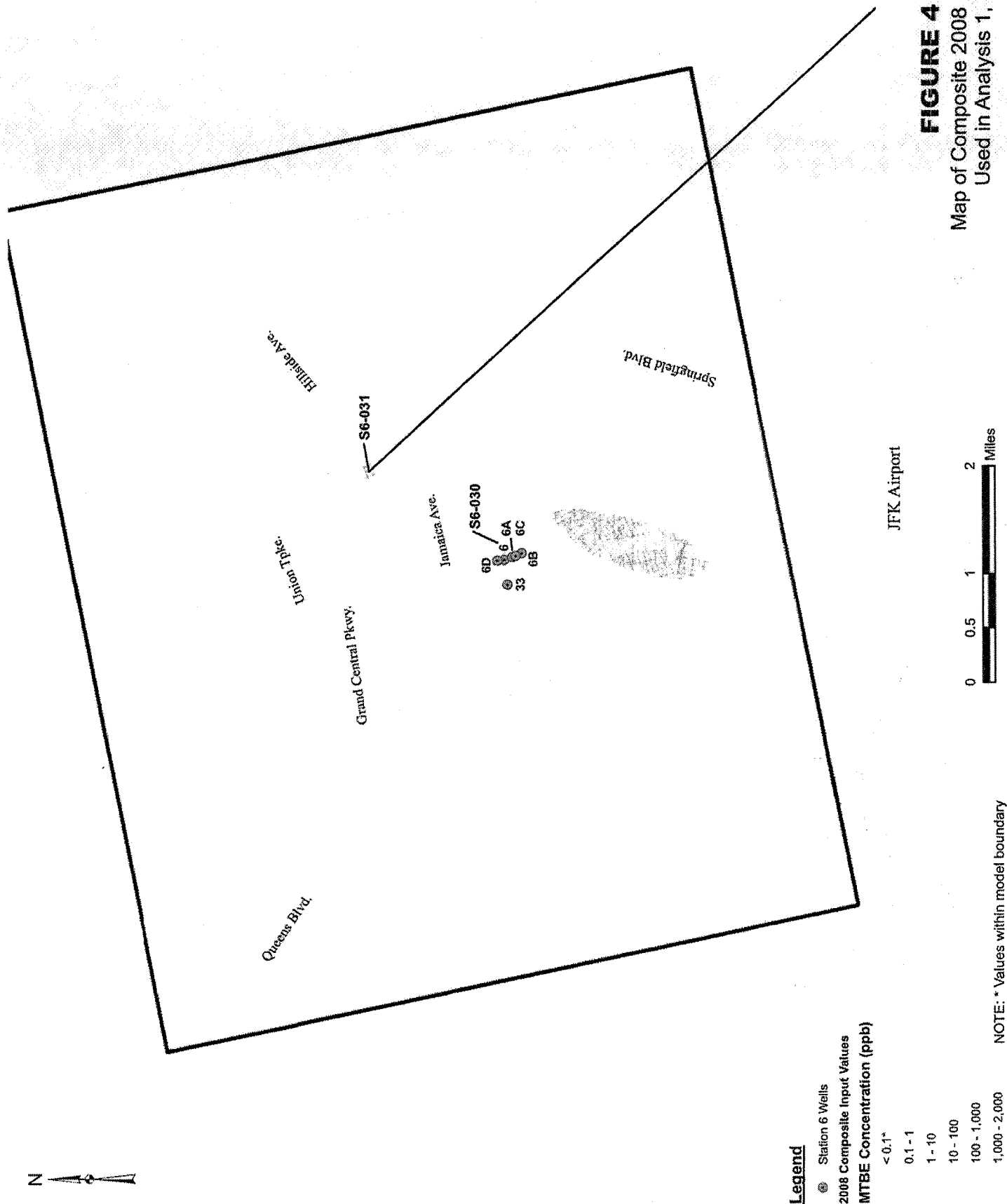
April 20, 2009

Date

To develop a map of the 2008 conditions, a contour map was first compiled of 2004 water quality conditions (Figure 3). The contour map is intended to represent a 'snapshot' of water quality conditions in the aquifer system during 2004. In compiling this map, ambient monitor well locations (such as DEP supply well locations and USGS monitor well locations) were considered to be representative of a broad area surrounding each well. Source data (such as monitor well data from gasoline discharge sites) were considered to represent localized conditions in the immediate vicinity of the spill site. Maximum concentration data for the period of interest were used from each spill site location, and the area of each source contour was assessed for the associated MTBE mass. The contour map compiled using this procedure was imported into the model and was assigned as input values to corresponding model cells for use as initial MTBE concentrations for a ground-water transport simulation for the 2004 – 2008 period.

The TMR model was then calibrated to determine appropriate transport parameters (such as dispersivity) in the LBG model by comparing the observed MTBE concentrations in some of the monitoring wells with simulated values. The calibration compared the 2004 and 2008 data sets. 2004 was considered an appropriate starting point for this process as an MTBE 'ban' was established in New York State beginning in January 2004. As a result, the primary bulk of MTBE mass resulting from gasoline spills to ground water would have taken place in this area by January 2004. No biodegradation of MTBE was assumed to occur during ground water transport. Yearly recharge (2004 to 2008) was calculated based on precipitation data from John F. Kennedy International Airport, New York. The recharge rates for 2004 to 2008 were based on the ratio of recharge to precipitation in 1991 calibrated MPI flow model.

The annual average pumping rates from the production wells in the model domain from 2004 to 2008 was obtained from MPI and was used to simulate transient pumping conditions during the calibration period (Table 3). A total of five (5) stress-periods were simulated, each stress period comprised of 365-days. A sensitivity analysis was performed by varying dispersivity values in the model. Sensitivity analysis was not performed on the horizontal and vertical hydraulic conductivity, storage and porosity parameters, as the flow model had already been calibrated by MPI. Dispersivity values are scale-dependent, and longitudinal dispersivity increases with increasing transport distance. The final dispersivity values (longitudinal, vertical, and transverse) obtained from the calibration exercise are summarized below. These dispersivity values are within the published ranges for similar aquifers (Gelhar and Rehfeldt, 1992; Schulze-Makuch, 2005).



**FIGURE 4**  
Map of Composite 2008 Input Values  
Used in Analysis 1, Layer 1